

ABSTRACT OF THE DISCLOSURE

The invention relates to a method and apparatus for improving software availability of a cluster computer system via a software rejuvenation technique, in which a program is temporarily stopped at an adequate time point that a manager of a cluster computer system constituted by several servers can expect, and then restarted. In the invention, both aspects of software and hardware are considered, a proactive fault-tolerance technique is utilized via software rejuvenation and availability is improved through determination of the optimal rejuvenation period according to a software unstable rate and a hardware failure rate of the cluster system so that features of a high-available computer system can be ensured efficient in cost.